

**Before the  
Federal Communications Commission  
Washington, DC 20554**

In the Matter of	)	
	)	
Facilitating the Deployment of Text-to-911 and	)	PS Docket No. 11-153
Other Next Generation 911 Applications	)	
	)	
Framework for Next Generation 911	)	PS Docket No. 10-255
Deployment	)	
	)	
	)	

To: Chief, Public Safety and Homeland Security Bureau

**COMMENTS OF  
THE BOULDER REGIONAL EMERGENCY TELEPHONE SERVICE AUTHORITY**

The Boulder Regional Emergency Telephone Service Authority (“BRETSA”), by its attorney, hereby submits its comments on the November 16, 2016 request of the Maine Emergency Services Bureau (“Maine”) for the Commission to clarify the point of demarcation for text-to-911 between wireless providers and Maine’s NG9-1-1 system (“Request”).<sup>1</sup>

**I. The States Have Jurisdiction Over 9-1-1 Calls.**

If a call originates and terminates in the same state, the call is jurisdictionally *intrastate*. Section 3 of the Communications Act of 1934, as amended, defines intrastate communications as communications originating and terminating in the same state. 47 U.S.C. §153(28)(A) and (C) Section 3(28)(A), 47 U.S.C. §153(28)(A), defines “interstate communications” as communications originating and terminating in different states. Section 3(28)(C) , 47 U.S.C. §153(28)(A), excepts from the definition of “interstate communications,” “wire or radio

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<sup>1</sup> BRETSA is a Colorado 9-1-1 Authority which establishes, collects and distributes the Colorado Emergency Telephone Surcharge to fund 9-1-1 service in Boulder County, Colorado.

communication between points in the same State, Territory, or possession of the United States, or the District of Columbia, through any place outside thereof, if such communication is regulated by a State commission.” *See, also, National Association of Regulatory Utility Commissioners v. F.C.C.*, 746 F.2d 1492, 1498 (1984). 9-1-1 calls not only originate and terminate in the same state, they originate and terminate in the same city or county. 9-1-1 calls are routed to the local PSAP which can dispatch First Responders to the caller’s location.

While the Communications Act preempts certain state authority over CMRS providers, that preemption is limited to entry regulation and rate regulation.<sup>2</sup> 9-1-1 calls are thus intrastate calls subject to the authority of the states, and it is up to the states to (i) allocate costs for provision of 9-1-1 service between the originating service providers (“OSPs”) and the PSAPs, and (ii) select the transmission methods (e.g. MPLS vs VPN, including protocol conversions, monitoring requirements, diversity requirements, etc.)

## **II. The Reasoning of The King County Letter Remains Sound.**

To the extent the Commission does exercise jurisdiction over the division of costs of implementation and provision of E9-1-1 services; the Commission’s reasoning in finding that the input to the 9-1-1 Selective Router is the appropriate demarcation point, remains sound.

### **A. The Commission Found That the Input to the 9-1-1 Selective Router Is the Appropriate Demarcation Point For Financial Responsibility for Wireless E9-1-1 Calls.**

In Letter from Thomas J. Sugrue, Chief, Wireless Telecommunications Bureau, FCC, to Marlys R. Davis, E911 Program Manager, King County E-911 Program Office, (WTB May 7,

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<sup>2</sup> 47 U.S.C. §332(c)(3)(A) (“[N]o State or local government shall have any authority to regulate the entry of or the rates charged by any commercial mobile service or any private mobile service, *except that this paragraph shall not prohibit a State from regulating other terms and conditions of commercial mobile services.*” Emphasis added.) *WWC Holding Co. v. Sopkin*, 488 F.3d 1262, 1274 (10th Cir. 2007).

2001), 2001 WL 491934 (*King County Letter*); *In the Matter of Revision of the Commission's Rules to Ensure Compatibility with Enhanced 911 Emergency Calling Systems, Request of King County, Washington*, Order on Reconsideration, 17 FCC Rcd 14789, para. 3 (2002) (“*King County Reconsideration Order*”), the Commission held that the input to the 9-1-1 Selective Router is the appropriate demarcation point for allocating costs between wireless carriers and PSAPs in the provision of wireless E9-1-1 service. Further, in the *King County Reconsideration Order*, the Commission extended its finding that the input to the 9-1-1 Selective Router would serve as the demarcation point for financial responsibility between the wireless carriers and the PSAPs to the provision of Phase II location information.<sup>3</sup>

The basis for the *King County Letter* and *King County Reconsideration Order* was that the functionality of the 9-1-1 Selective Router was required to identify the PSAP to which a 9-1-1 call would be routed, and thus delivery of the 9-1-1 call and Phase I (and Phase II) information to the 9-1-1 Selective Router was necessary for the wireless carrier to meet its 9-1-1 call delivery obligations.<sup>4</sup> The Commission also stated in the *King County Reconsideration Order* that it “has strenuously avoided solutions that are other than technology-neutral in crafting regulatory requirements for E9-1-1 implementation.”<sup>5</sup>

**B. The Session Border Controller Is the NG9-1-1 Equivalent to the 9-1-1 Selective Router.**

The NG9-1-1 Data Complex is an aggregate of the functions and processes necessary to the delivery of 9-1-1 calls to the appropriate PSAP in an NG9-1-1 environment. The NG9-1-1 Data Complex is described in terms of functions rather than location because the disparate

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<sup>3</sup> *King County Reconsideration Order*, 17 FCC Rcd at 14793.

<sup>4</sup> See, e.g., *King County Reconsideration Order*, 17 FCC Rcd at 14792, 14793.

<sup>5</sup> *King County Reconsideration Order*, 17 FCC Rcd at 14794.

functions and processes can be performed at disparate locations, “in the cloud.”<sup>6</sup> Not only can these functions and processes be performed at disparate locations, but states and the Commission appear to have little influence over the limited number of locations of the NG9-1-1 Data Complexes. In the wake of the April 2014 multistate NG9-1-1 outage, Intrado (now West Safety Services) which operates just two NG9-1-1 Data Complexes nationwide, persisted in arguing that “having more routers isn’t necessarily the rational solution to the pre- or post-outage circumstance,” and that additional data complexes would not have mitigated the outage.<sup>7</sup>

Because of the location independence of the NG9-1-1 Data Complex and its various functions and processes, it is inappropriate to select the location of just any one of the various functions or processes as the demarcation point. The SBC of the state ESInet, however, is a natural demarcation point which provides session establishment, management and tear-down functions, and many other essential functions, including functions essential to delivery of the call to the appropriate PSAP or other destination. These functions are essential to the carrier meeting its call-delivery obligations.

### **III. No State Or PSAP Should Pay For 9-1-1 Functionalities Beyond Its State Borders.**

In Section II above, BRETSA endorses the State of Maine’s position that the SBC for a state’s ESInet should be the demarcation point for financial responsibility for 9-1-1 call processing and delivery as between an OSP and a PSAP. However with ever-evolving digital communications technology and potential changes in the structure of 9-1-1 services, the specific

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<sup>6</sup> Testimony of Mike Nelson, Senior Technical Officer, February 25, 2014 Workshop in Colorado PUC Proceeding No. 13M-0781T, Transcript, p. 33 l. 14-24, p. 60 l. 1-6 (available at [https://www.dora.state.co.us/pls/efi/EFI\\_Search\\_UI.search](https://www.dora.state.co.us/pls/efi/EFI_Search_UI.search)).

<sup>7</sup> Reply Comments of Intrado, filed June 30, 2014 in PS Docket No. 14-72, *Inquiry into Circumstances of Major 911 Outage Centered in Washington State On April 9-10, 2014*, at 2-4 (available at <https://www.fcc.gov/ecfs/filing/6017863258/document/7521356437>).

demarcation points or their locations may cease to exist, just as 9-1-1 Selective Routers are being supplanted through the transition to NG9-1-1.<sup>8</sup>

As stated above, 9-1-1 calls are by nature *intrastate* calls. In no case should a state, 9-1-1 Authority or PSAP pay costs based upon a demarcation point located beyond the state's borders. For example, BRETSA is aware that one wireless provider has located its MSC which serves Colorado within the State of Kansas. Intrado has deployed just two NG9-1-1 Data Complexes nationwide. States, 9-1-1 Authorities and PSAPs should not be required to subsidize OSP, and NG9-1-1 provider, business decisions regarding location of their MSCs or nominal location of their NG9-1-1 Data Complexes. Yet that could be the very result if demarcation point between OSP and 9-1-1 Authority financial responsibility for processing and delivery of 9-1-1 calls is situated outside a state's borders. Authorities in some states could be charged more for delivery of 9-1-1 calls than Authorities in other states, based on the service provider's decision regarding the configuration of its network or other facilities and services.<sup>9</sup>

It is important to note that it is the subscribers to OSP services which select the OSP, and choose to contact 9-1-1 over the OSP facilities, but it is the Authority or PSAP which pays for delivery of the 9-1-1 call. Indeed, OSPs *cannot* charge a customer for making a 9-1-1 call, but Authorities/PSAPs are responsible for the cost of delivery of the call from the demarcation point. The Authorities/PSAPs responsible for answering their constituent's calls have limited

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<sup>8</sup> BRETSA is aware and understands that (i) AT&T has been selected by FirstNet to construct the FirstNet network, (ii) AT&T has announced plans to construct a nationwide ESInet, (iii) the FirstNet proposals for each state will include use of FirstNet fiber facilities for distribution of 9-1-1 calls to PSAPs in order to help fund the FirstNet buildout, and (iv) the FirstNet Authority is itself lobbying to eliminate the capability of states to opt-out of the national FirstNet network proposal. In the context of such a national ESInet which states would be effectively forced into using to meet the enormous costs of the overall FirstNet fiber and radio buildout, it is not clear that states would retain authority over their own ESInets and 9-1-1 services and that there would be discrete state ESInets.

<sup>9</sup> The current trend towards pricing communications services by bandwidth rather than distance may ameliorate the impact upon Authorities in states in which MSCs and NG9-1-1 Data Complexes are *not* located.

bargaining power. As a practical matter, an Authority or PSAP cannot refuse to accept 9-1-1 calls above a certain price-point, for example. Public authorities cannot decline to accept calls reporting an incident and to dispatch First Responders to an incident to save a life or protect property, no matter how excessive or unreasonable the charges for delivery of that call may be.

Even as to the NG9-1-1 provider, competitive pricing of service appears unrealistic and impermanent. Intrado, which provides service to individual PSAPs on a competitive basis, admits that it loses money in doing so.<sup>10</sup> While a state, Authority or PSAPs can solicit competitive bids from putative NG9-1-1 providers, and select that which offers the best terms of service, it can only solicit bids for service as defined at the time of solicitation. However NG9-1-1 is a dynamic, evolving service built upon evolving technologies. An Authority contracting for service will not have the same bargaining power as new features or services are introduced.<sup>11 12</sup> Even when a contract granted for a limited period of time is expiring and a new

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<sup>10</sup> The Vice President and General Counsel of Intrado, the primary company supplying 9-1-1 service to individual PSAPs, stated that Intrado loses money serving individual PSAPs. Testimony of Craig Donaldson, September 22, 2015 Workshop in Colorado PUC Proceeding No. 15R-0318T, Transcript, p. 163 l. 1 – p. 166 l. 17 (available at [https://www.dora.state.co.us/pls/efi/EFI\\_Search\\_UI.search](https://www.dora.state.co.us/pls/efi/EFI_Search_UI.search)).

<sup>11</sup> This is one of the reasons BRETSA continues to favor tariffed 9-1-1 service priced on a cost plus rate-of-return basis. As new features and services are offered, a utilities commission can review a cost study for the service and approve the supported costs plus the established rate-of-return for the services. The other reason BRETSA supports tariffing of 9-1-1 service is that the service continues to have many of the indicia of a natural monopoly, with high capital costs and low incremental prices per unit of production and additional barriers to entry, such as (i) a small number of customers and only one customer per city or county (potential competitors will not build out facilities on the possibility that a customer *may* subscribe to service at some time in the future), and (ii) as discussed above, the full costs and potential consequences of a change in providers, provider systems and processes. Tariffed rates approximate competitive pricing. While traditional tariff-based regulated-monopoly approaches may discourage innovation, innovation in 9-1-1 services is being driven by NENA/APCO, the FCC through its advisory groups, and competitors in the 9-1-1 support sector.

<sup>12</sup> Consider the State of Maine's experience in having a TCC quote a price for delivery of text-to-911 messages by MPLS, and when Maine found the price unreasonable and elected to instead have the messages delivered by VPN, the TCC imposed monitoring requirements at an additional charge because *it* found VPN an unreliable transmission method. Letter from Maria P. Jacques, ENP, Director, Maine Emergency Services Communication Bureau, to David G. Simpson, Chief, Public Safety and Homeland Security Bureau, FCC (November 16, 2016) (Maine Letter) at 1-2, available at [https://ecfsapi.fcc.gov/file/111789902143/Text\\_IPConnectivityDemarcationPoint\\_ME.pdf](https://ecfsapi.fcc.gov/file/111789902143/Text_IPConnectivityDemarcationPoint_ME.pdf). If PSAPs and states have no bargaining power with the TCCs and other providers from which they must purchase 9-1-1 service, then regulation of provider rates by the Commission or state utility commissions will be necessary, or demarcation points must be established at the state SBC or otherwise within the state borders.

RFP is issued, the costs of (i) replacing the current NG9-1-1 provider's facilities and possibly modifying facilities which connect with them, (ii) integrating PSAP systems with the new NG9-1-1 provider's systems and processes, (iii) retraining dispatch and technical personnel on the systems and processes used by the new provider, and (iv) the potential consequences of errors in replacement, integration or use of facilities and processes; can be so substantial as to impede selection of new provider.

#### **IV. Summary.**

Because 9-1-1 calls are jurisdictionally *intrastate*, it is up to the states to determine where the demarcation point for financial responsibility for delivery of 9-1-1 calls (including text messages and other formats of calls) should lie. To the extent the Commission determines the demarcation point, however, the determination should be consistent with the *King County Letter* and *King County Reconsideration Decision* and place the demarcation point at the SBC for the state ESInet.

In the event that evolving technology or markets eliminate SBCs for state ESInets, or even eliminate discrete state-ESInets, the demarcation point must nevertheless remain within the borders of each state. 9-1-1 calls are *intrastate* calls, and the networks configured by providers to best suit their needs which takes transport or processing beyond a state's borders should not increase costs to a state. A state should not be required to subsidize a provider's business decisions; nor should a state face discriminatory rates because of a provider's choice of location for its facilities and where functionalities and services will be provided. If providers of essential 9-1-1 services are able to establish unreasonable rates or call-delivery requirements because states or PSAPs lack bargaining power, then rate regulation is necessary.

Respectfully submitted,

**BOULDER REGIONAL EMERGENCY  
TELEPHONE SERVICE AUTHORITY**

By:



Joseph P. Benkert

**Joseph P. Benkert, P.C.**

P.O. Box 620308

Littleton, CO 80162

(303) 948-2200

*Its Attorney*

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